

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute

William A. Hinton State Laboratory Institute 305 South Street, Jamaica Plain, MA 02130

12/09/2011

Ryan Mingo Assistant District Attorney, Suffolk County

Dear ADA Mingo,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan and Peter Piro.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #

4. Analysis sheets with custodial chemist's hand notations and test results.

5. GC/Mass Spectral analytical data for samples #

Ann Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Peter Piro was analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

#### Curriculum Vitae

#### Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

#### Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \*Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- \*Maintenance and repairs of all analytical instruments.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Notary Public.

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department for the Food and Drug Administration.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

#### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

#### Curriculum Vitae

Peter Piro

### **EDUCATION**

Boston Unversity

B.A. in Chemistry and Minor in Biology, 1989

#### HONORS

Magna Cum Laude, 3.6 GPA Graduated with Distinction in Chemistry Valedictorian of the Chemistry Department

### EXPERIENCE

Department of Public Health/State Laboratory Institute

Chemist III, II, I/ Assistant Analyst

December 1991-Present

Supervise the operation and maintenance of the Gas Chromatography/Mass

Spectrometry Laboratory. Analyze controlled substances for State and Federal law enforcement agencies. Qualified as an expert witness in Massachusetts courts and U.S. District Court.

Massachusetts Health Research Institute

Laboratory Technician

September 1990-December 1991

Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank.

## TRAINING AND ORGANIZATIONS

- \* Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.
- \* Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991.
- \* Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27<sup>th</sup> 1995.
- \* Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.
- \* Completed training in Mass Spectrometry Troubleshooting and Maintenance, October 25<sup>th</sup> 2002, at Agilent Technologies.
- \* Notary Public since 1993.



CC #				
BOOK #	64		 	
PAGE #	54			
		,		

DRUG RECEIPT	PAGE#54		
	DESTRUCTION #		
District/Unit A-1 DCU			
Name & Rank of Arresting Officer ろん いん しょ	u AN	1D# 10060	· · ·
DEFENDANT'S NAME	ADDRESS	CITY	STATE
		poedf	MA
		BOSTON	MA
		BOSTON	MA
		LAB US	E ONLY
DESCRIPTION OF ITEMS SUBMITTED	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER
tenul Cocadules	i els	Tilelea	
crack cocalne	IPIB	2,040	
CRAUL COCAINE	iels	1,43/2	
		·	
			-
o be completed by ECU personnel only	) 0	<u>.</u>	NOTE THE RESERVE TO SERVE THE RESERVE THE
ame and Rank of Submitting Officer	un Ly	1D#	) v
eceived by	0 /	Date	-9-11
•		ECU Control #	

Date Analyzed: 2-21-11 City: Boston D.C.U. Police Dept. Officer: P.O. Diana Lopez Def: Amount: Subst: SUB No. Cont: Cont: pb Date Rec'd: 03/09/2011: No. Analyzed: 1.66 Net Weight: 0.14 Gross Wt.: # Tests: 6950 Findings: Cocai Ne Prelim: Cocave (2) No. Date Analyzed: 3-21-11 City: Boston D.C.U. Police Dept. Officer: P.O. Diana Lopez Def: Amount: Subst: SUB Cont: pb No. Cont: Date Rec'd: 03/09/2011 No. Analyzed: Net Weight: 0 - 09 Gross Wt.: 2.04 # Tests: 6450 Prelim: cocave @ Findings: OCATNE Date Analyzed: 3-21-11 City: Boston D.C.U. Police Dept. Officer: P.O. Diana Lopez Def: Amount: Subst: SUB Cont: pb

1

No. Cont: Date Rec'd: 03/09/2011 No. Analyzed: Net Weight: 0.09 Gross Wt.: 1.63 # Tests:

Prelim: Cocarració Findings: GCAINE

# DRUG POWDER ANALYSIS FORM

SAMPLE #	AGENCY 208	7 <del>6</del> 0	ANALYST_	A29
No. of samples tested:	**		vidence Wt.	
PHYSICAL DESCRIPTION:		Gros	s Wt ( ):	0.2052
OFF while gove	ished sybst	ne Gros	sWt():	
	1 160		Pkg. Wt:	
			-	0.1445
		·		
PRELIMINARY TESTS Spot Tests		Microcr	γstalline Tests	
Cobalt Thiocyanate <u>(                                   </u>		Gold Chloride →	~	
Marquis		TLTA (		
Froehde's		<u>нто</u>	ER TESTS	•
Mecke's				
				M. M. C.
PRELIMINARY TEST RESULTS		GC/MS CON	FIRMATORY 1	EST
RESULTS COCCUP		RESULTS	cocavie	·
DATE 3-18-11		MS OPERATOR	320	
		DATE	3-21-11	

Revised 7/2005

## DRUG POWDER ANALYSIS FORM

SAMPLE #	_ AGENCY BOSY	e <u>^</u>	ANALYST	<i>4</i> 2
No. of samples tested:		Ev	idence Wt.	
PHYSICAL DESCRIPTION:		Gros	s Wt( ):	0.1163
off white	min susse.	ne Gross	s Wt ( ):	
	17185		Pkg. Wt:	
			Net Wt:t	0.0993
	•	. •		
PRELIMINARY TESTS Spot Tests		Microen	/stalline Tests	
Cobalt Thiocyanate <u>( −) →</u>	<del>-</del>	Gold Chloride	+	
Marquis		TLTA (	1+	
Froehde's	_	отн	ER TESTS	•
Mecke's	<u>-</u>	***************************************		
PRELIMINARY TEST RESULTS		GC/MS CON	FIRMATORY T	EST
RESULTS COCCUMO	<del>_</del> ;	RESULTS	cocanie	
DATE 3-18-11	<del>-</del>	MS OPERATOR	<b>416</b>	
		DATE	3-20-11	

Revised 7/2005

# DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY BOSPE	ANALYST	ASO
No. of samples tested:		Evidence Wt.	· ·
PHYSICAL DESCRIPTION:		Gross Wt ( ):	0.1314
off we ie	epril engers 6	Gross Wt ( ):	
	11.62	Pkg. Wt:	
		Net Wt:	0.0955
		•	
			,
PRELIMINARY TESTS Spot Tests		Microcrystalline Tes	<u>sts</u>
Cobalt Thiocyanate ( _ ) >	· · · · · · · · · · · · · · · · · · ·	Gold Chloride +	en e
Marquis		TLTA <u>( ~) ~</u>	
Froehde's		OTHER TESTS	•
Mecke's	·		
	·		
PRELIMINARY TEST RESULT	<u></u> <u>S</u>	GC/MS CONFIRMATORY	TEST
RESULTS COCALAG		RESULTS COCAL	
DATE 3-18-11		MS PERATOR 739	
		DATE 3-21-1	

Revised 7/2005

12-9-11

Information from Data File:

File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777626.D

Operator

Date Acquired

: 19 Mar 2011 19:45

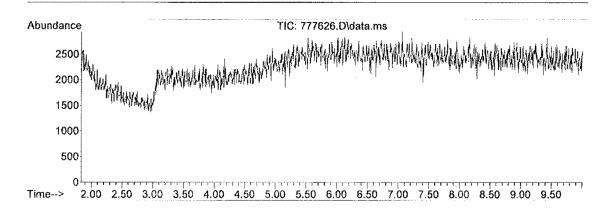
Sample Name Submitted by : BLANK

1

Vial Number

: ASD

AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time

Area

Area 왕 Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

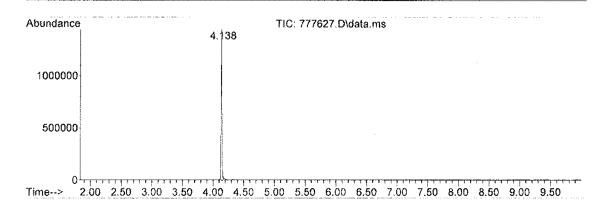
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Operator : ASD

Date Acquired : 19 Mar 2011 19:58

Sample Name : COCAINE STD

Submitted by : ASD Vial Number : 27 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.138	1353311	100.00	100.00

The state of the s

File Name : C:\msdchem\1\data\SYSTEM6\03 19 11\777627.D

Operator : ASD

Date Acquired : 19 Mar 2011 19:58

Sample Name : COCAINE STD

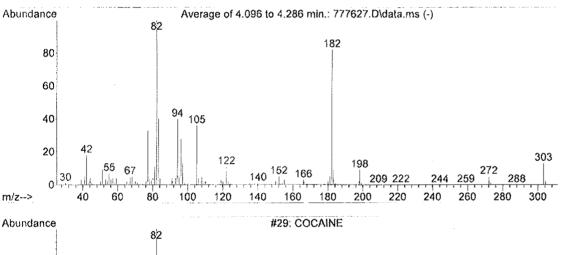
Submitted by : ASD
Vial Number : 27
AcquisitionMeth: DRUGS.M
Integrator : RTE

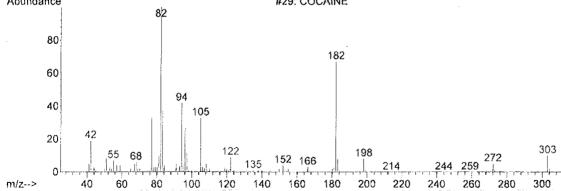
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1.	4.14	C:\Database\SLI.L COCAINE	000050-36-2	99



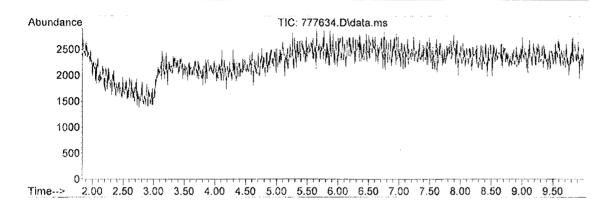


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Operator : ASD

Date Acquired : 19 Mar 2011 21:30

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time Area Area % Ratio %

<sup>\*\*\*</sup>NO INTEGRATED PEAKS\*\*\*

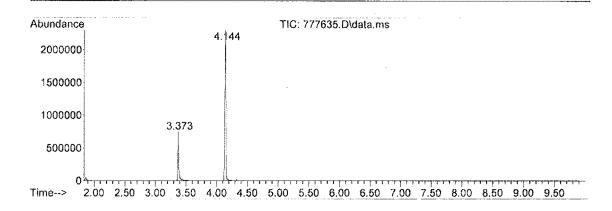
File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777635.D

Operator : ASD

Date Acquired : 19 Mar 2011 21:43

Sample Name :

Submitted by : ASD
Vial Number : 35
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.373	826296	24.06	<del> </del>
4.144	2608677	75.94	

File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777635.D

Operator : ASD

Date Acquired 19 Mar 2011 21:43

Sample Name Submitted by

Vial Number

ASD 35

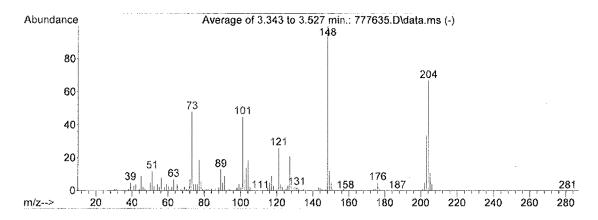
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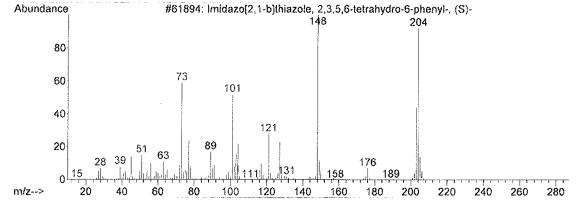
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Minimum Quality: 80 C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID		CAS#	Qual
1.	3.37	C:\Database\NIST08.L Imidazo[2,1-b]thiazole, Levamisole Levamisole	2,3,5,6-tet	014769-73-4 006649-23-6 006649-23-6	99 99 99





File Name : C:\msdchem\1\data\SYSTEM6\03 19 11\777635.D

Operator : ASD

Date Acquired 19 Mar 2011 21:43

Sample Name

Submitted by ASD Vial Number 35 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST08.L Minimum Quality: 80

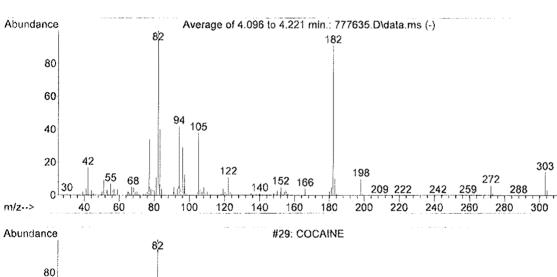
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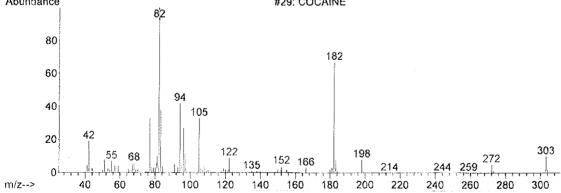
PK# RTLibrary/ID CAS# Qual

2 4.14 C:\Database\SLI.L

COCAINE

000050-36-2



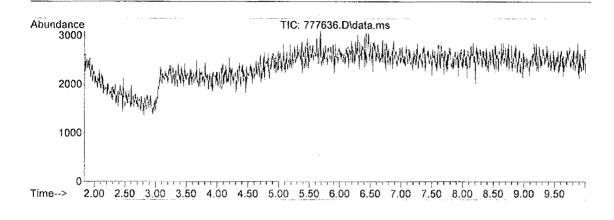


File Name : C:\msdchem\1\data\SYSTEM6\03 19 11\777636.D

Operator : ASD

Date Acquired : 19 Mar 2011 21:56

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area %

Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

#### Area Percent / Library Search Report

Information from Data File:

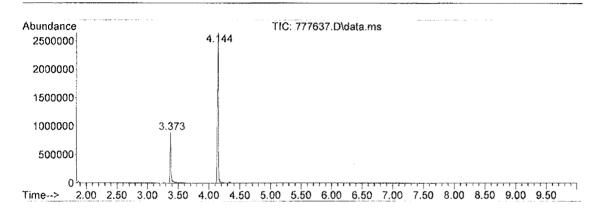
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Operator : ASD

Date Acquired : 19 Mar 2011 22:09

Sample Name :

Submitted by : ASD
Vial Number : 37
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.373 4.144		23.82 76.18	

File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777637.D

Operator : ASD

Date Acquired : 19 Mar 2011 22:09

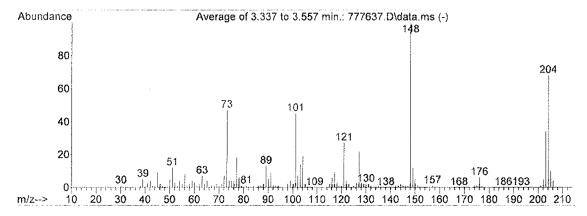
Sample Name :
Submitted by : ASD
Vial Number : 37
AcquisitionMeth: DRUGS.M
Integrator : RTE

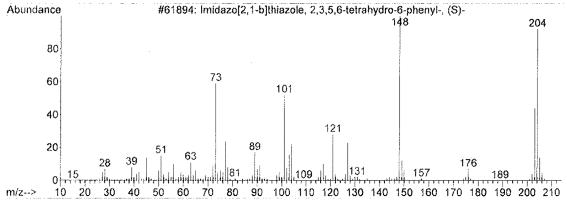
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

P	K#	RT	Library/ID	CAS#	Qual
	1	3.37	C:\Database\NIST08.L Imidazo[2,1-b]thiazole, 2,3,5,6-tet Levamisole Levamisole	014769-73-4 006649-23-6 006649-23-6	99 99 98





File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777637.D

Operator : ASD

Date Acquired : 19 Mar 2011 22:09

37

Sample Name Submitted by

Vial Number

PK#

: ASD

AcquisitionMeth: DRUGS.M Integrator : RTE

RT

Search Libraries: C:\Database\SLI.L

Library/ID

Minimum Quality: 80

C:\Database\NIST08.L

Minimum Quality: 80

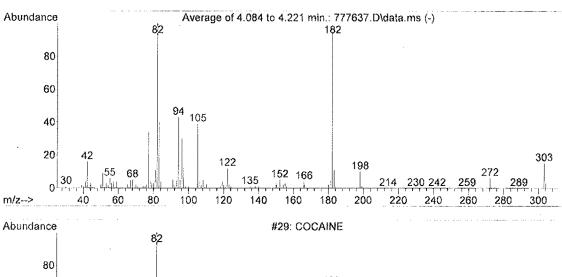
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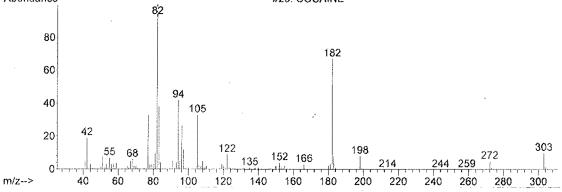
CAS# Qual

.....

2 4.14 C:\Database\SLI.L COCAINE

000050-36-2





File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777638.D

: ASD Operator

Date Acquired

: 19 Mar 2011 22:23

Sample Name Submitted by : BLANK ASD

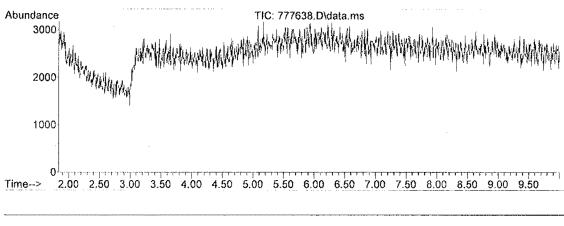
Vial Number

1

AcquisitionMeth: DRUGS.M

Integrator

: RTE



Ret. Time

Area

Area

Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

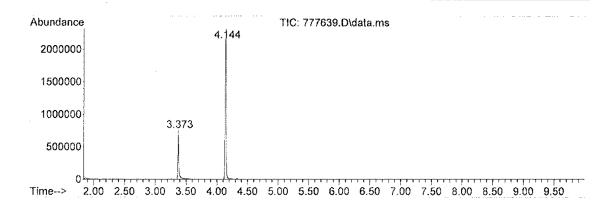
File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777639.D

Operator : ASD

Date Acquired : 19 Mar 2011 22:36

Sample Name :

Submitted by : ASD
Vial Number : 39
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.373 4.144	841511 2631664	24.23 75.77		

File Name : C:\msdchem\1\data\SYSTEM6\03 19 11\777639.D

Operator ASD

Date Acquired 19 M<u>ar 201</u>1 22:36

Sample Name Submitted by

ASD Vial Number 39 AcquisitionMeth: DRUGS.M Integrator : RTE

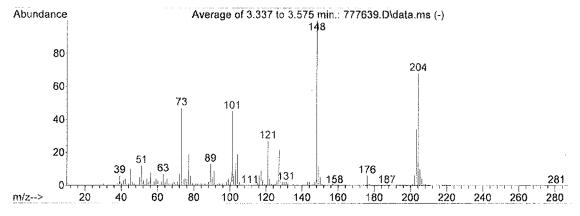
Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

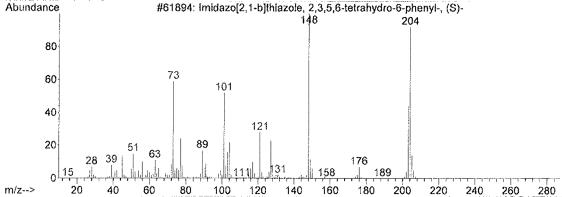
C:\Database\NIST08.L

C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual 3.37 1 C:\Database\NIST08.L Imidazo[2,1-b]thiazole, 2,3,5,6-tet 014769-73-4 99

Levamisole 006649-23-6 99 Levamisole 006649-23-6 98





不是一个人,我们就是一个人的人,也是一个人的人,也是一个人的人,也是一个人的人,也是一个人的人的人,也是一个人的人的人,也是一个人,也是一个人,也是一

File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777639.D

Operator : ASD

Date Acquired : 19 Mar 2011 22:36

Sample Name :
Submitted by : ASD
Vial Number : 39
AcquisitionMeth: DRUGS.M
Integrator : RTE

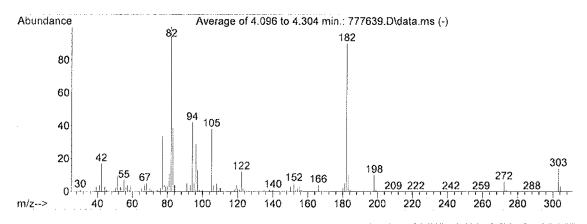
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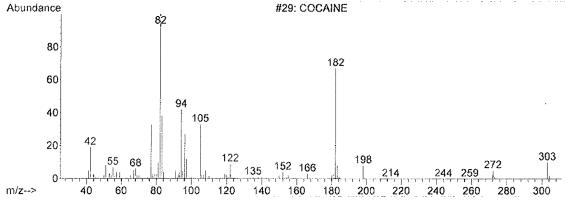
C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK# RT Library/ID CAS# Qual

2 4.14 C:\Database\SLI.L COCAINE 000050-36-2 99



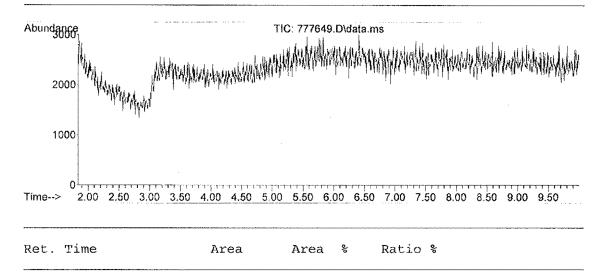


File Name : C:\msdchem\1\data\SYSTEM6\03 19 11\777649.D

Operator : ASD

Date Acquired : 20 Mar 2011 00:47

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

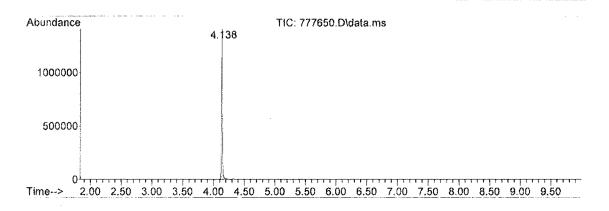
File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777650.D

Operator : ASD

Date Acquired : 20 Mar 2011 1:00

Sample Name : COCAINE STD

Submitted by : ASD Vial Number : 27 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.138	1360768	100.00	100.00

File Name : C:\msdchem\1\data\SYSTEM6\03\_19\_11\777650.D

Operator : ASD

Date Acquired : 20 Mar 2011 1:00

Sample Name : COCAINE STD

Submitted by : ASD Vial Number : 27 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST08.L

C:\Database\PMW\_TOX2.L

PK# RT Library/ID CAS# Qual

1 4.14 C:\Database\SLI.L

COCAINE

000050-36-2

99

Minimum Quality: 80

